IN THE CLAIMS:

Please cancel Claim 9 without prejudice and add the following new claims:

19
20. (New) An apparatus that measures pulse transit time of a living subject, comprising:

first and second pulse sensors to be placed at a first pulse point and a second pulse point, respectively, said first pulse point and said second pulse point being spaced from one another; and

a signal processing system connected to said first and second pulse sensors and operative to differentiate first and second pulse wave signals corresponding to outputs of said first and second pulse sensors, respectively, to select corresponding points of said first and second pulse wave signals based on the results of the differentiation, and to detect a time delay between the selected points.

20
21. (New) An apparatus according to Claim 19, wherein said signal processing system selects a point of predetermined slope characteristic from each of said first and second pulse wave signals.

33

21 20
22. (New) An apparatus according to Claim 21, wherein said signal processing system selects a point of maximum slope from each of said first and second pulse wave signals.

22 19
23. (New) An apparatus according to Claim 20, wherein at least one of said pulse sensors is a fiberoptic sensor having a fused-fiber coupling region.

23 22
24. (New) An apparatus according to Claim 23, wherein at least a portion of said fused-fiber coupling region is configured such that it can be deflected to change an output of said fiberoptic sensor without said coupling region being put under tension.

24 22
25. (New) A method according to Claim 23, wherein said fused-fiber coupling region is substantially U-shaped.

24